#### **REMARKS**

This is a full and timely response to the outstanding Office Action mailed February 13, 2003 (Paper No. 6). Upon entry of this response, claims 1-21 remain under consideration and claims 23-39 have been withdrawn. Claims 1-7 and 12-18 have been amended, and claim 22 has been cancelled. Applicant asserts that the amendments add no new subject matter to the present application. Applicant respectfully requests that the amendments being filed herewith be entered and request that there be reconsideration of all pending claims.

## 1. Objection to Claims 2, 3, 5-7, 13, 14, and 16-18

Claims 2, 3, 5-7, 13, 14, and 16-18 have been objected to because of grammatical errors. Claims 2 and 13 have been amended to add the word "that" between the "corresponds" clause and the "is" clause. Similarly, claims 3, 5-7, 14, and 16-18 have been amended to add the word "that" between the "corresponds" clause and the "retrieves" clause. Applicant believes the amendments overcome the objection to claims 2, 3, 5-7, 13, 14, and 16-18, and requests that the rejection be withdrawn.

#### 2. Rejection of Claims 12-21 under 35 U.S.C. §101

Claims 12-21 have been rejected under 35 U.S.C. §101 as directed to non-statutory subject matter. Claim 12 is amended to recite: "A computer readable medium having a program for evaluating and ranking exact and probabilistic search rules, the program comprising logic configured to perform the steps of..." Claims 13-21 depend from claim 12. Applicant believes the amendments overcome the 35 U.S.C. §101 rejection of claims 12-21, and requests that the rejection be withdrawn.

# 3. Rejection of Claims 1, 5-7, 12 and 15-18 under 35 U.S.C. §112

Claims 1, 5-7, 12 and 15-18 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as his invention. Claims 1, 5-7, 12 and 15-18 are amended as described below to overcome the 35 U.S.C. §112, second paragraph, rejection.

## a. Claims 1 and 12

The Office Action states there is insufficient antecedent basis for the limitation "the efficiency." Claim 1 is amended to recite "an efficiency measure," while claim 12 is amended to remove the limitation "the efficiency." Accordingly, Applicant believes the amendments overcome the 35 U.S.C. §112, second paragraph, rejection to claims 1 and 12, and requests that the rejection be withdrawn.

## b. Claims 5-7 and 16-18

The Office Action states there is insufficient antecedent basis for the limitation "the number of instances." Claims 5-7 and 16-18 are amended to recite "a number of instances." Accordingly, Applicant believes the amendments overcome the 35 U.S.C. §112, second paragraph, rejection to claims 5-7 and 16-18, and requests that the rejection be withdrawn.

#### c. Claim 15

The Office Action states there is insufficient antecedent basis for the limitation "the amount of time." Claim 15 is amended to recite "an amount of time." Accordingly, Applicant believes the amendment overcomes the 35 U.S.C. §112, second paragraph, rejection to claim 15, and requests that the rejection be withdrawn.

## 4. Rejection of Claims 1-22 under 35 U.SC. §103

Claims 1-22 have been rejected under §103(a) as allegedly obvious over *Neal* (U.S. 6,324,534) in view of *Yamazaki et al.* (U.S. 6,204,939) and further in view of *Megiddo et al.* (U.S. 6,182,070). Applicant respectfully traverses these rejections. It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly, all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

#### a. Claim 1

Applicant respectfully submits that claim 1, as amended, is allowable for at least the reason that the proposed combination of *Neal* in view of *Yamazaki et al.* and further in view of *Megiddo et al.* does not disclose, teach, or suggest at least the feature of "collecting a plurality of statistical values related to the performance of each search rule executed in attempt to locate the target record" as recited in claim 1.

The Office Action states that Yamazaki et al. discloses a method comprising "collecting a plurality of statistical values related to the performance of each search rule executed in attempt to locate the target record." Applicant respectfully disagrees with this assertion. Yamazaki et al. appears to disclose, at most, a rule based processing system which allows the execution order of rules to be changed, and which can be configured to select an optimum rule for execution from a set of detailed rules (Yamazaki et al. col. 1, lines 10-20).

However, a search rule in *Yamazaki et al.* is not a "search rule executed in attempt to locate the target record." Instead, a search rule in *Yamazaki et al.* is part of an expert system which solves problems such as efficiently mapping logical circuit descriptions to physical parts

(Yamazaki et al. col. 13, lines 15-45; col. 17, lines 25-40). Applicant could find no discussion in Yamazaki et al. of a "search rule executed in attempt to locate the target record," as in Applicant's claimed invention.

Furthermore, Yamazaki et al. discloses only a single "numeral value" in selecting an optimum rule for execution, not a "plurality of statistical values" as recited in claim 1. Finally, the "numeral value" disclosed in Yamazaki et al. is not a "statistical value" as recited in claim 1. The plain meaning of the term "statistical value" implies that the value is related to a set of data values. However, the "numeral value" in Yamazaki et al. is a single value related to a single application of the rule, rather being related to set of data values, and therefore is not a "statistical value" as in Applicant's claimed invention.

Megiddo et al. also fails to teach, suggest or disclose at least a "search rule executed in attempt to locate the target record." Megiddo et al. appears to disclose, at most, a data mining system which discovers association rules which apply to transactions recorded in a database, and ranks the discovered rules by statistical significance (Megiddo et al. col. 3, lines 25-40.)

However, Applicant could find no discussion in Megiddo et al. of a "search rule executed in attempt to locate the target record" as in Applicant's claimed invention.

Finally, the Office Action admits that *Neal* does not disclose, teach, or suggest using at least a "search rule executed in attempt to locate the target record." (Office Action, p. 5, third paragraph.).

Accordingly, the proposed combination of *Neal* in view of *Yamazaki et al.* and further in view of *Megiddo et al.* does not teach at least the claimed limitations of a "search rule executed in attempt to locate the target record" as recited in claim 1. Since the proposed combination of *Neal* in view of *Yamazaki et al.* and further in view of *Megiddo et al.* does not teach at least the

above-described features recited in claim 1, a *prima facie* case establishing an obviousness rejection has not been made. Thus, claim 1 is not obvious under the proposed combination of *Neal* in view of *Yamazaki et al.* and further in view of *Megiddo et al.*, and the rejection should be withdrawn.

#### b. Claims 2-11

Because claim 1 is believed to be allowable over the cited art of record, Applicant respectfully submits that claims 2-11 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that the dependent claims 2-11 contain all elements of independent claim 1. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully requests that the rejection to claims 2-11 be withdrawn.

# c. Claim 12

Applicant respectfully submits that claim 12, as amended, is allowable for at least the reason that the proposed combination of *Neal* in view of *Yamazaki et al.* and further in view of *Megiddo et al.* does not disclose, teach, or suggest at least the feature of "collecting a plurality of statistical values related to the performance of each search rule executed in attempt to locate the target record" as recited in claim 12. The Office Action admits that *Neal* does not disclose this limitation, and Applicant respectfully asserts that neither *Yamazaki et al.* nor *Megiddo et al.* discloses this limitation. As discussed above with regard to claim 1, neither *Yamazaki et al.* nor *Megiddo et al.* teaches the limitation of a "search rule executed in attempt to locate the target record" as recited in claim 12. Thus, claim 12 is not obvious under the proposed combination of *Neal* in view of *Yamazaki et al.* and further in view of *Megiddo et al.*, and the rejection should be withdrawn.

## d. Claims 13-21

Because claim 12 is believed to be allowable over the cited art of record, Applicant respectfully submits that claims 13-21 (which depend from independent claim 12) are allowable as a matter of law for at least the reason that the dependent claims 13-21 contain all elements of independent claim 12. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully requests that the rejection to claims 13-21 be withdrawn.

## e. Claim 22

Claim 22 is cancelled without prejudice, waiver, or disclaimer, and therefore, the rejection of this claim is rendered moot. Applicant takes this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicant reserves the right to pursue the subject matter of this cancelled claim in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the cancelled subject matter to the public.

# **CONCLUSION**

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and presently pending claims 1-21 be allowed to issue. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

Scott A. Horstemeyer

Reg. No. 34,183

100 Galleria Parkway, NW Suite 1750 Atlanta, Georgia 30339-5948 770-933-9500